



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,249	09/18/2003	Achim Kraiss	13906-111001 / 2003P00173	6955
32864 7590 03/26/2009 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER				
TO, JENNIFER N				
ART UNIT		PAPER NUMBER		
2195				
NOTIFICATION DATE		DELIVERY MODE		
03/26/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

### Office Action Summary

**Application No.**

10/665,249

**Applicant(s)**

KRAISS ET AL.

**Examiner**

JENNIFER N. TO

**Art Unit**

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-850)  
Paper No(s)/Mail Date 11/28/2003 & 04/05/2004 & 07/25/2005  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Inventor's Patent Application  
6) ☐ Other: \_\_\_\_\_



### **DETAILED ACTION**

1. Claims 1-26 are presenting for examination.

#### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited "a computer-readable medium" of Claim 26. The Specification does not mention the recited "a computer-readable medium". Thus, there is no support or antecedent basis for the recited "a computer-readable medium" that allows the meaning of the terms to be ascertained, as required in 37 CFR 1.75(d)(1). Appropriate correction is required.

### **Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

*Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.*

Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Claims 1-17** recites a "computer system". As currently recited the "system" could be reasonably be interpreted as program per se. Thus, the

Art Unit: 2195

claims do not fall within any of the four enumerated categories of patentable subject matter in section 101.

**Claim 26** recites a “computer readable medium”. However, the specification fails to provide clear support or antecedent basis for this limitation. Without clear support or antecedent basis for “computer readable medium”, it is unclear if Applicant intends to cover both statutory subject matter (such as EPROM, ROM, floppy disc, RAM, and CD-ROMs) and non-statutory subject matter (such as paper, signals, and carrier wave).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 9-11, 13-20, and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornick et al (U.S. Patent No. 6865573).
4. As per claim 1, Hornick teaches the invention substantially as claimed including a computer system for invoking execution of analytical tasks in sequence (fig. 5), the computer system being programmed to:

Art Unit: 2195

receive a request to execute an analytical task from a front-end software application (col. 5, lines 51-67; col. 6, lines 1-2);

invoke execution of the first additional analytical task on a first analytical engine (col. 6, lines 3-29); and

use information generated from the execution of the first additional analytical task to invoke execution of the requested analytical task on a second analytical engine (col. 6, lines 29-46).

5. Hornick does not specifically teach determine that a first additional analytical task needs to be executed before the requested analytical task.

6. However Hornick discloses that receiving the user request for a desired result data and based upon the received user input parameters, the system would select the appropriate model, prediction parameters and scoring data into scoring engine, and the scoring engine output the result to the prediction/recommendation engine to execute the user request (col. 5, lines 51-67; col. 6, lines 1-48).

7. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have included the teaching of determine that a first additional analytical task needs to be executed (scoring task) before the requested analytical task (prediction/recommendation task) because in order for the prediction/recommendation task to be performed to satisfy the user request, the prediction/recommendation task need to utilize the result from the scoring.

Art Unit: 2195

Thus it is important for the system to have include the teaching of determine that a first additional analytical task needs to be executed (scoring task) before the requested analytical task (prediction/recommendation task). Therefore, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to have utilize the teaching of Hornick's system for supporting user in performing data mining operations (i.e. analytical tasks) by providing a data mining application programming interface that includes an advance interface which including support for hierarchical, object-oriented programming languages and sophisticated programming language constructs without the need integrating using additional tools (Hornick, abstract).

8. As per claim 2, Hornick teaches that wherein the computer system is programmed to use information contained within the request in conjunction with predetermined task definition information to determine that the first additional analytical task needs to be executed before the requested analytical task (col. 5, lines 1-51).

9. As per claim 3, Hornick teaches that wherein the computer system is programmed to use a task name in the request in conjunction with predetermined task definition information to determine that the first additional analytical task needs to be executed before the requested analytical task (.col. 5, lines 1-51; col. 6, lines 3-13).

Art Unit: 2195

10. As per claim 4, Hornick teaches that wherein the computer system is further programmed to send a response back to the front-end software application that includes information relating to the execution of the first additional analytical task and the requested analytical task (col. 6, lines 46-47).

11. As per claim 5, Hornick teaches that wherein the computer system is programmed to: receive a request to execute an analytical task from a front-end software application, the request having input values; select a first set of the input values needed for execution of the first additional analytical task; and use the first set of selected input values to invoke execution of the first additional analytical task on the first analytical engine (fig. 5; col. 5, lines 51-67; col. 6, lines 1-46).

12. As per claim 6, Hornick teaches that wherein the computer system is programmed to: select a second set of the input values needed for execution of the requested analytical task; and use information generated from the execution of the first additional analytical task and the second set of selected input values to invoke execution of the requested analytical task on the second analytical engine (fig. 5; col. 5, lines 51-67; col. 6, lines 1-46).

13. As per claim 7, Hornick teaches that wherein the first and second set of selected input values share a common set of input values (fig. 5; col. 6, lines 14-42).



Art Unit: 2195

14. As per claim 9, Hornick teaches that wherein the requested analytical task is a prediction task, and wherein the second analytical engine is a prediction engine (fig. 5, the prediction/recommendation task, and prediction/recommendation engine).

15. As per claim 10, Hornick teaches that wherein the computer system is programmed to use information contained within the request to select the first analytical engine to be used in executing the first additional analytical task, and to select the second analytical engine to be used in executing the requested analytical task (fig. 5; col. 5, lines 51-67; col. 6, lines 1-46).

16. As per claim 11, Hornick teaches that wherein the computer system is programmed to use information contained within the request to select a first data store to be used during execution of the first additional analytical task, and to select a second data store to be used during execution of the requested analytical task (col. 6, lines 3-46).

17. As per claim 13, Hornick teaches that wherein the second analytical engine is a prediction engine (fig. 5, item 505) and wherein the second data store is a data mining model (fig. 4, item 424, col. 5, lines 3-40).

18. As per claim 14, Hornick teaches that wherein the first analytical engine is located externally from the second analytical engine (fig. 5).

19. As per claim 15, it is rejected for the same reason as claim 1 above. In addition, Hornick teaches invoke execution of the second additional analytical task on a third analytical engine and use information generated from the execution of the second additional analytical task to invoke execution of the first additional analytical task on the first analytical engine (fig. 5; col. 5, lines 51-67; col. 6, lines 1-46).

20. As per claim 16, Hornick teaches wherein the front-end software application is located externally from the computer system (fig. 2, the front-end software application is located in user device).

21. As per claim 17, Hornick teaches that wherein the first and second analytical engines are located externally from the computer system (fig. 5).

22. As per claims 18-20, 22-26, they are rejected for the same reason as claims 1-2, 4, 9-10, and 14-15 above.

23. Claims 8, 12, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornick et al (hereafter Hornick) (U.S. Patent No. 6865573), as applied in claims 1 and 18 above, and in view of Lane et al (hereafter Lane) (U.S. Publication No. 2004/0162812).

Art Unit: 2195

24. As per claim 8, Hornick teaches the invention substantially as claimed in claim 1 above. Hornick did not specifically teach a key performance indicator (KPI) lookup task, and a KPI engine.

25. However, Lane teaches a key performance indicator (KPI) lookup task, and a KPI engine (figs. 2C, 3A-3B, paragraphs [0030], lines 9-13, [0033], lines 1-12).

26. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have included the KPI lookup tasks and KPI engine as suggested in Lane into the first analytical task and a first analytical engine of Hornick's system because both system are directed to the same field of endeavor for addressing the need of performing analytical tasks (i.e. processing query from users), and by incorporated the teaching of Lane into Hornick would improved utility of Hornick's system by expanding the capability of the system to further support business perspective operations.

27. As per claim 12, it is rejected for the same reason as claims 1, 10-11, and 8 above. In addition, Lane further teaches that wherein the first data store is a KPI set (figs. 2C, 3A-3B).

28. As per claim 21, it is rejected for the same reason as claim 8 above.

Art Unit: 2195

***Conclusion***

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see attached PTO 892 form for details).

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER N. TO whose telephone number is (571)272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/  
Primary Examiner, Art Unit 2194

/Jennifer To/  
Patent Examiner  
AU 2195